## REMARKS/ARGUMENTS

Favorable consideration of this application is respectfully requested.

Claims 1-20 are pending in this application. Claim 20 has been amended as suggested at the bottom of page 2 of the outstanding Action. Accordingly, as the suggestion in the outstanding Action has been adopted, it is believed to be clear that no new matter has been added.

The outstanding Official Action presented a rejection of Claims 20 under 35 U.S.C. §101 asserting that this claim is directed to non-statutory subject matter and a rejection of Claims 1-20 as being anticipated by Lline et al. (U.S. Published Patent Application No. 2004/0068491, Lline).

The rejection of Claims 20 under 35 U.S.C. §101 is believed to be overcome by the present amendment that adopts the suggestion at the bottom of page 2 of the outstanding Action in terms of adding the language "which employs a storage medium." Accordingly, withdrawal of this rejection of Claim 20 under 35 U.S.C. §101 is respectfully requested.

Before considering the outstanding prior art rejection based upon anticipation of Claims 1-20 by Lline, it is believed that a brief review of the present invention would be helpful. In this regard, it is noted that independent Claims 1, 19, and 20 clearly require producing a copy of the entire hierarchal data at a time of starting an access to the hierarchical data as to each transaction. Writing access as to each transaction is then made as to its respective copy, while avoiding a collision with accesses as to other transactions. When each transaction is finished, the writing access made as to each transaction (on its respective copy) is reflected on the original hierarchical data (not a copy), while also reflecting that writing access on copies of the hierarchical data for the other transactions that have not finished. In this way, the present invention can guarantee the isolation of transactions and controlling the order of processing such that the execution of transactions becomes

serializable, even in the case where a plurality of transactions make accesses to the hierarchical data in parallel.

In contrast, Iline only discloses a method for protecting data of a hierarchical operation by using a restricted access model data structure in which a second writer node is prevented from writing data to a first data store while a first writer node is prevented from writing data to a second data store (see, e.g., the Abstract and paragraph [0011]). It is noted that data stored in the first data store and data stored in the second data store are not copies of anything much less copies of hierarchical data, because the first data store stores data read by a first reader node that is then written by the first writer node. Correspondingly, the second data store stores data read by the second reader node that is then written by the second writer node. The data stored in the second data store is different from data stored in the first data store because the first writer node and the second writer node write different data. In Iline, both the first reader node and the second reader node may read the same data from the first data store, but the first writer node is never allowed to write anything into the second data store while the second writer node is never allowed to write anything into the first data store (see, e.g., paragraphs [0012] and [0048]).

The first data store and the second data store may also be storing different data from the beginning in Iline, in which case these data are obviously different from each other all of the time. Note also that data stored in the first data store or the second data store is only data relevant to a corresponding hierarchical operation, not the entire hierarchical data. See, e.g., paragraph [0046] noting that data results from tests can be written into the first data store.

Thus, the outstanding Action is not accurate in contending that Iline teaches or suggests producing a copy of the entire hierarchical data for each transaction and temporarily making the writing access by each transaction on its respective copy, and then eventually reflecting the writing access made by each transaction on the original hierarchical data as

well as on copies for the other transactions, as explicitly required by independent Claims 1, 19, and 20.

Moreover, each reader-writer pair of Iline works exclusively on a corresponding data store after initially reading data (that is why data can be protected in Iline). Accordingly, the design of Iline insures that no collision between accesses made by different reader-writer pairs could possibly occur.

Thus, the outstanding Action is also incorrect in contending that Iline teaches or suggests judging whether any collision occurs and then carrying out a processing for avoiding the collision, as explicitly required in independent Claims 1, 19, and 20.

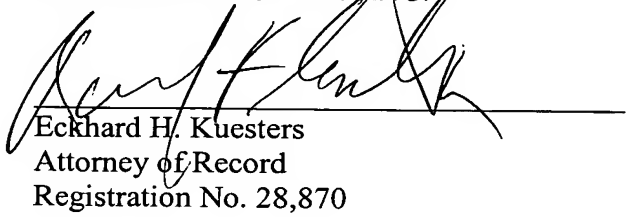
Consequently, Iline actually fails to disclose all the features recited in independent Claims 1, 19 and 20 and therefore, it is logically impossible to suggest that Iline anticipates Claims 1, 19, and 20. Accordingly, withdrawal of this rejection based on anticipation of Claims 1, 19, and 20 is respectfully requested.

Further, as Claims 2-18 depend from Claim 1 and include all the subject matter thereof, these claims clearly patentably define over Iline for at least the reasons set forth above as to Claim 1. In addition, each of these dependent claims adds features that are further not taught or suggested by Iline and patentably define thereover for this reason as well. Therefore, withdrawal of the rejection of Claims 2-18 is also respectfully requested.

Accordingly, it is respectfully submitted that no further issues remain outstanding in the present application, and that this application is clearly in condition for formal allowance and an early and favorable action to that effect is, therefore, respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Attorney of Record
Registration No. 28,870

Raymond F. Cardillo, Jr.
Registration No. 40,440

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

I:\ATTY\RFC\24\248156-AM.DOC